

Notice of Allowability	Application No.	Applicant(s)	
	10/731,523	ANNE MAE GAFFNEY	
	Examiner	Art Unit	
	Kamal A. Saeed	1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-5.
3. ☒ The drawings filed on 09 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>3/17/04</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

RD

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-5, are drawn to a process for improving the performance of a catalyst, classified in class 502 and several subclasses.
- II. Claims 6-8, are drawn to a process of preparing unsaturated carboxylic acid, classified in class 562, and several subclasses.
- III. Claims 9-11, drawn to a process of preparing unsaturated nitriles, classified in class 558 and several subclasses.
- IV. Claim 12, is directed to an improved catalyst composition, classified in class 502, and several subclasses.

The inventions are distinct, each from the other because of the following reasons:

The inventions of Group I and Groups II or III are distinct processes for preparing distinct products that are classified in different classes and subclasses. Group I is directed to a process of improving the performance characteristics of a catalyst while Group II and III are directed to a process of preparing unsaturated carboxylic acid and unsaturated nitriles respectively. Each process is different from the other, because they differ in structure and/or element so as to be patentably distinct and a prior art reference anticipating but one of the groups would not render obvious the other groups under 35 U.S.C. 103.

The inventions of Group II and III are two distinct processes for preparing two distinct products that are classified in different classes and subclasses. Each process is different from the other, because they differ in structure and/or element so as to be patentably distinct and a prior

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art reference anticipating but one of the groups would not render obvious the other groups under 35 U.S.C. 103.

Invention Groups I and IV are related as product and process of making thereof. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process as claimed can be used to make another materially different product or (2) that the product as claimed can be made by another materially different process (MPEP 806.05(f)). In the instant case, the product as claimed can be made by another materially different process as demonstrated pages 19-22 of the specification . Therefore separate search considerations are involved, which would impose a burden if unrestricted.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purpose as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

In response to the restriction requirement, applicants' representative Marcella Badner, on 04/17/2005, has elected without traverse, the invention of Group I, claims 1-5, drawn to a process for improving the performance of a catalyst is acknowledged. Claims 6-12 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention. The withdrawn subject matter is patentably distinct from the elected subject matter as it differs in structure and element and would require separate search

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considerations. In addition, a reference, which anticipates one group, would not render obvious the other.

Therefore, the restriction requirement deemed proper and is made FINAL.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicants preserve their right to file a divisional on the non-elected subject matter.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with M on 05/06/2005.

The application has been amended as follows:

Delete non-elected claims 6-12.

Reasons for Allowance

Applicants claim a process for improving the performance characteristic of a catalyst comprising the steps of: providing a precursor for a mixed metal oxide having the empirical formula of $J_jM_mN_nY_yZ_zO_o$ as defined in claim 1; adding a source of NO_x to said precursor to

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form an admixture and calcining the admixture. The closest prior art is to Ushikubo et al (US 5,281,745) teach promoted mixed metal oxide catalyst having the empirical formula of $M_aV_bTe_cX_xO_n$ wherein X is selected from the group consisting of Nb, Ta, W, Ti, Al etc. a is 1, b is 0.01-1.0, c is 0.01-1.0, x is 0.01-1. The comparative data presented in the specification shows that NO_x **treated** mixed metal oxide give better yield than NO_x **un-treated** mixed metal oxide. The prior art doesn't teach or suggest the mixed metal oxide catalyst as described in this application.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamal A Saeed whose telephone number is (571) 272-0705. The examiner can normally be reached on M-T 7:00 AM- 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joseph K. McKane, can be reached at (571) 272-0699.

Communication via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by applicant and should be addressed to [joseph.mckane@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees will not communicate with applicant via Internet e-mail where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is of record an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy published by the Patent and Trademark Office Official Gazette on February 25, 1997 at 1195 OG 89.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or public PAIR only. For more information about the pair system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

KAMAL A. SAEED, PH.D.

PRIMARY EXAMINER

Kamal Saeed
05/14/05